## HICKSVILLE WATER DISTRICT



4 DEAN STREET POST OFFICE BOX 9065

HICKSVILLE, N.Y. 11802-9065 516/931-0184 FAX 516/931-6506

> POPULATION SERVED OVER 47,000



F0051928 1921

ANTHONY IANNONE SUPERINTENDENT

BOARD OF WATER COMMISSIONERS

NICHOLAS J. BRIGANDI COMMISSIONER

KARL M. SCHWEITZER COMMISSIONER

WILLIAM SCHUCKMANN COMMISSIONER

July 7, 2016

Regional Administrator Judith A. Enck US Environmental Protection Agency - Region 2 290 Broadway New York, New York 10007-1866

Re:

Hicksville Water District
Plant No. 4 – Newbridge Road
1,4 - Dioxane Sampling Program

Dear Regional Administrator Enck:

Our consulting engineer, H2M architects + engineers, has previously written to you in a letter dated April 18, 2016, requesting any information the United State Environmental Protection Agency (EPA) may have regarding potential sources of VOCs, including 1,4-dioxane, upgradient of the Hicksville Water District's Well No. 4-2 (NYSDEC No. N-08526). We are in receipt of your June 7, 2016 response and request that your agency take immediate action to investigate and collect groundwater data upgradient of Well No. 4-2.

As you are aware, the Hicksville Water District (District), located in Long Island, NY, supplies potable water to its 48,000 customers by means of groundwater wells. The District's Well No. 4-2, located on Newbridge Road in Hicksville, NY, was originally constructed in 1969 to a depth of 600 feet below ground with an authorized capacity of 1,400 GPM. This well provided a clean source of water for approximately twenty years until trichloroethene (TCE) and tetrachloroethene (PCE) were detected in the well product. Two granular activated carbon (GAC) vessels were installed to treat these contaminants. However in 1995, the GAC vessels were replaced by an air stripping tower to address the newly detected VOCs, 1,4-dioxane was first detected in Well No. 4-2 in 2013 as part of the Unregulated Contaminant Monitoring Rule (UCMR) program, a contaminant that is unfortunately not effectively removed the current VOC treatment system.

As of March 2016, Well No. 4-2 exhibited the highest levels of 1,4-dioxane among New York State water suppliers with a maximum detection of 34 µg/l. This is above 50% the New York State Maximum Contaminant Level (MCL) of 50 µg/l for unspecified organic contaminants. Additionally, 1,4-dioxane has been classified by your agency as a probable human carcinogen. We believe such statistics and classification is enough to warrant an EPA sampling program of all EPA sites that are potentially impacting Well No. 4-2. We are aware of your data collection programs including the study of "Operable Unit 2" located west of Well No. 4-2, and the New York State Department of Environmental Conservation (DEC) sampling program of the Northrop Grumman plume; however, the alarming concentrations of 1,4-dioxane in Well No. 4-2 calls for special attention from the EPA.

USEPA Region 2 July 7, 2016 Page 2 of 2

Well No. 4-2 is in the vicinity of several industrial sites in the area which feasibly may have impacted this well including areas containing 1,1,1-trichloroethane (1,1,1-TCA). As listed in the technical fact sheet for 1,4-dioxane, published by the EPA in January 2014, 1,4-dioxane is a stabilizer for chlorinated solvents and is likely to be present in sites contaminated with such chemicals, particularly 1,1,1-TCA. It is possible that one or more of these sites are sources affecting the groundwater quality.

Unfortunately, a failure of the UCMR program is that beyond testing point-of-entry for public water suppliers, there is absolutely no other testing required or performed. Following detection of a known solvent related contaminant in a well, comprehensive testing of the groundwater upgradient of the well should have been an immediate next step taken by the EPA. A point in time sample at an entry point location tells us nothing about the extent of the contamination or the ultimate risk to the well. As such, we respectfully request that your office direct a sampling program at all known sites (on and off site) that could be impacting Well No. 4-2 with 1,4-dioxane.

Should you have any questions or concerns, please contact our office.

Very truly yours,

Hicksville Water District

cc: Joseph Frank, Esq.

Authory January January

Basil Seggos - NYSDEC Acting Commissioner

Carrie M. Gallagher – NYSDEC Region 1 Regional Director Richard W. Humann, P.E. - H2M architects + engineers

жэнкэго (Hicksyllia Water District) - 10510NKWD1604 - Plant No. 4 VOC UpgradentCorrespondence/16,97,06 - Sampling Request - EPA dack



07 : Zi kij zi 710 7102

CECENED

## HICKSVILLE WATER DISTRICT



4 DEAN STREET POST OFFICE BOX 9065

HICKSVILLE, N.Y. 11802-9065 516/931-0184 FAX 516/931-6506

BOARD OF WATER COMMISSIONERS

NICHOLAS J. BRIGANDI COMMISSIONER

KARL M. SCHWEITZER COMMISSIONER

WILLIAM SCHUCKMANN COMMISSIONER POPULATION SERVED

FOUNDED 1921

ANTHONY IANNONE SUPERINTENDENT

July 7, 2016

Regional Director Carrie M. Gallagher New York State Department of Environmental Conservation – Region 1 50 Circle Road Stony Brook, NY 11790-3409

Re: Hicksville Water District
Plant No. 4 – Newbridge Road
1,4 - Dioxane Sampling Program

Dear Regional Director Gallagher:

Our consulting engineer, H2M architects + engineers, has previously written to you in a letter dated April 18, 2016, requesting any information the New York State Department of Environmental Conservation (DEC) may have regarding potential sources of VOCs, including 1,4-dioxane, upgradient of the Hicksville Water District's Well No. 4-2 (NYSDEC No. N-08526). Additionally, we are writing to you requesting that your agency take immediate action to investigate and collect groundwater data upgradient of Well No. 4-2.

As you are aware, the Hicksville Water District, located in Long Island, NY, supplies potable water to its 48,000 customers by means of groundwater wells. The District's Well No. 4-2, located on Newbridge Road in Hicksville, NY, was originally constructed in 1969 to a depth of 600 feet below ground with an authorized capacity of 1,400 GPM. This well provided a clean source of water for approximately twenty years until trichloroethene (TCE) and tetrachloroethene (PCE) were detected in the well product. Two granular activated carbon (GAC) vessels were installed to treat these contaminants. However in 1995, the GAC vessels were replaced by an air stripping tower to address the newly detected VOCs. 1,4-dioxane was first detected in Well No. 4-2 in 2013, as part of the United State Environmental Protection Agency (EPA) Unregulated Contaminant Monitoring Rule (UCMR) program, a contaminant that is unfortunately not effectively removed the current VOC treatment system.

As of March 2016, Well No. 4-2 exhibited the highest levels of 1,4-dioxane among New York State water suppliers with a maximum detection of 34  $\mu$ g/l. This is above 50% the New York State Maximum Contaminant Level (MCL) of 50  $\mu$ g/l for unspecified organic contaminants. Additionally, 1,4-dioxane has been classified by the EPA as a probable human carcinogen. We believe such statistics and classification is enough to warrant a DEC sampling program of all DEC sites that are potentially impacting Well No. 4-2. We are aware of the EPA data collection programs including a study located west of Well No. 4-2, and the DEC sampling program of the Northrop Grumman plume; however, the alarming concentrations of 1,4-dioxane in Well No. 4-2 calls for special attention from the DEC.

NYSDEC Region 1 July 7, 2016 Page 2 of 2

Well No. 4-2 is in the vicinity of several industrial sites in the area which feasibly may have impacted this well including areas containing 1,1,1-trichloroethane (1,1,1-TCA). As listed in the technical fact sheet for 1,4-dioxane, published by the EPA in January 2014, 1,4-dioxane is a stabilizer for chlorinated solvents and is likely to be present in sites contaminated with such chemicals, particularly 1,1,1-TCA. It is possible that one or more of these sites are sources affecting the groundwater quality.

Unfortunately, a failure of the UCMR program is that beyond testing point-of-entry for public water suppliers, there is absolutely no other testing required or performed. Following detection of a known solvent related contaminant in a well, comprehensive testing of the groundwater upgradient of the well should have been an immediate next step. A point in time sample at an entry point location tells us nothing about the extent of the contamination or the ultimate risk to the well. As such, we respectfully request that your office direct a sampling program at all known sites (on and off site) that could be impacting Well No. 4-2 with 1,4-dioxane.

Should you have any questions or concerns, please contact our office.

Very truly yours,

Hicksville Water District

cc: Joseph Frank, Esq.

Anthony Jamone, Superintendent

Basil Seggos - NYSDEC Acting Commissioner

Judith A. Enck - USEPA Region 2 Regional Administrator Richard W. Humann, P.E. - H2M architects + engineers

X:\HKWD (Hickswille Water District) - 10510\HKWD1604 - Plant No 4 VOC Upgrades\Correspondence\16 07.06 - Sampling Request - DEC docx

HICKSVILLE WATER DISTRICT 4 Dean Street • P.O. Box 9065 Hicksville, NY 11802-9065

After 5 days, return to

FIRST CLASS MAL

ZIP 11801 041U1253475

10001-100000

NEW YORK NEW YORK 10007-1866

290 BROADWAY

REGION 2

US ENVIRONMENTAL PROTECTION AGENCY

JUDITH A ENCK

REGIONAL ADMINISTRATION